Additionally, Claim 6 has been rejected under 35 U.S.C. § 103, as allegedly being unpatentable over Ohkawa '546 in view of Masuda '064 as applied to Claims 1-5 and 7-8 above, and further in view of U.S. Patent No. 6,384,122 to Hirakawa *et al.* and U.S. Patent No. 5,667,872 to Ohno *et al.*

Applicants respectfully traverse.

Claim 1 recites a resin that satisfies requirement (4), where requirement (4) is that, with respect to the swelling ratio measured at 220°C at an L/D of an orifice of 40, the ratio of a swelling ratio ($SR10^3$) at a shear rate of 2.4×10^3 sec^{-1} to a swelling ratio ($SR10^2$) at a shear rate of 1.2×10^2 sec^{-1}, $SR10^3/SR10^2$, is from 1.0 to 1.1.

Ohkawa '546 is deficient in that it fails to teach that its thermoplastic resin composition contains (E) a resin characterized by that, with respect to the swelling ratio measured at 220°C at an L/D of an orifice of 40, the ratio of a swelling ratio ($SR10^3$) at a shear rate of 2.4×10^3 sec^{-1} to a swelling ratio ($SR10^2$) at a shear rate of 1.2×10^2 sec^{-1}, $SR10^3/SR10^2$, is from 1.0 to 1.1.

Masuda '064 is relied upon to make up for this deficiency. Paragraph [0023] of Masuda '064 teaches as follows:

> [t]he biaxially stretched polypropylene film [thereof] uses a HMS-PP the melt strength of which is increased by introducing long-chain branches into polypropylene molecules. Specific examples of the HMS-PP the melt strength of which is increased by introducing long-chain branches include HMS-PP (Type name: PF-814, etc.) manufactured by Basell Polyolefins, HMS-PP (Type name: WB130HMS, etc.) manufactured by Borealis, and HMS-PP (Type name: D201, etc.) manufactured by Dow Chemical Company, etc.

See, paragraph [0023].

Applicants respectfully submit that Masuda '064 fails to alleviate the deficiencies of Ohkawa '546 and that a person of ordinary skill in the art would not have been motivated to combine the teachings of Masuda '064 and Ohkawa '546.

Masuda '064 fails to alleviate the deficiencies of Ohkawa '546 as Masuda '064 fails to teach or suggest the claimed resin satisfying requirement (4). Masuda '064 teaches that the introduction of long-chain branches into polypropylene molecules increases the melt strength thereof to a melt strength higher than that of molecules before the introduction of long-chain branches. Such a teaching in Masuda '064 provides that HMS-PP has a melt-strength higher than that of normal polypropylene because HMS-PP has long-chain branches in the molecules. Further, such a teaching in Masuda '064 provides that the introduction of long chain branches modify the polypropylene molecule thereof for the purpose of increasing the melt strength of the molecules. Masuda '064 does NOT teach that the introduction of a long-chain branched polypropylene into a thermoplastic resin composition increases the melt strength of the composition. As such, PF-814 is not used for the purpose of increasing the melt strength of a thermoplastic resin composition.

Further, a person of ordinary skill in the art would not have been motivated to use the HMS-PP, as disclosed in Masuda '064, in thermoplastic resin composition disclosed in Ohkawa '546. The composition disclosed in Ohkawa '546 is a composition designed for injection molding applications. Ohkawa '546 fails to teach that the composition is designed for applications other than injection molding. For example, Ohkawa '546 fails to teach the resin composition can be applied to biaxially oriented films. In contrast, Masuda '064 discloses

biaxially oriented films. Masuda '064 discloses that a biaxially stretched film thereof has high stiffness in the film longitudinal direction and contains regulated longitudinal fibrils. *See* Abstract. In this regard, a person of ordinary skill in the art would not have been motivated to look to the teachings in Masuda '064 to alleviate the deficiencies of Ohkawa '546.

Further, Masuda '064 teaches that the use of HMS-PP results in a biaxially stretched polypropylene film having a high strength in the longitudinal direction. *See* paragraph [0021]. Masuda '064 does not teach that the use of HMS-PP has effects in directions other than the longitudinal direction of biaxially stretched films. Masuda '064 also does not teach that the use of HMS-PP has an effect on non-stretched products. In this regard, a person of ordinary skill in the art would not have been motivated to use HMS-PP in the thermoplastic resin composition disclosed in Ohkawa '546.

Additionally, claims 2-8 depend from claim 1. In this regard, claims 2-8 are nonobvious for at least the same reasons as claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Ken Sakurabayashi
Registration No. 58,490

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: February 28, 2007